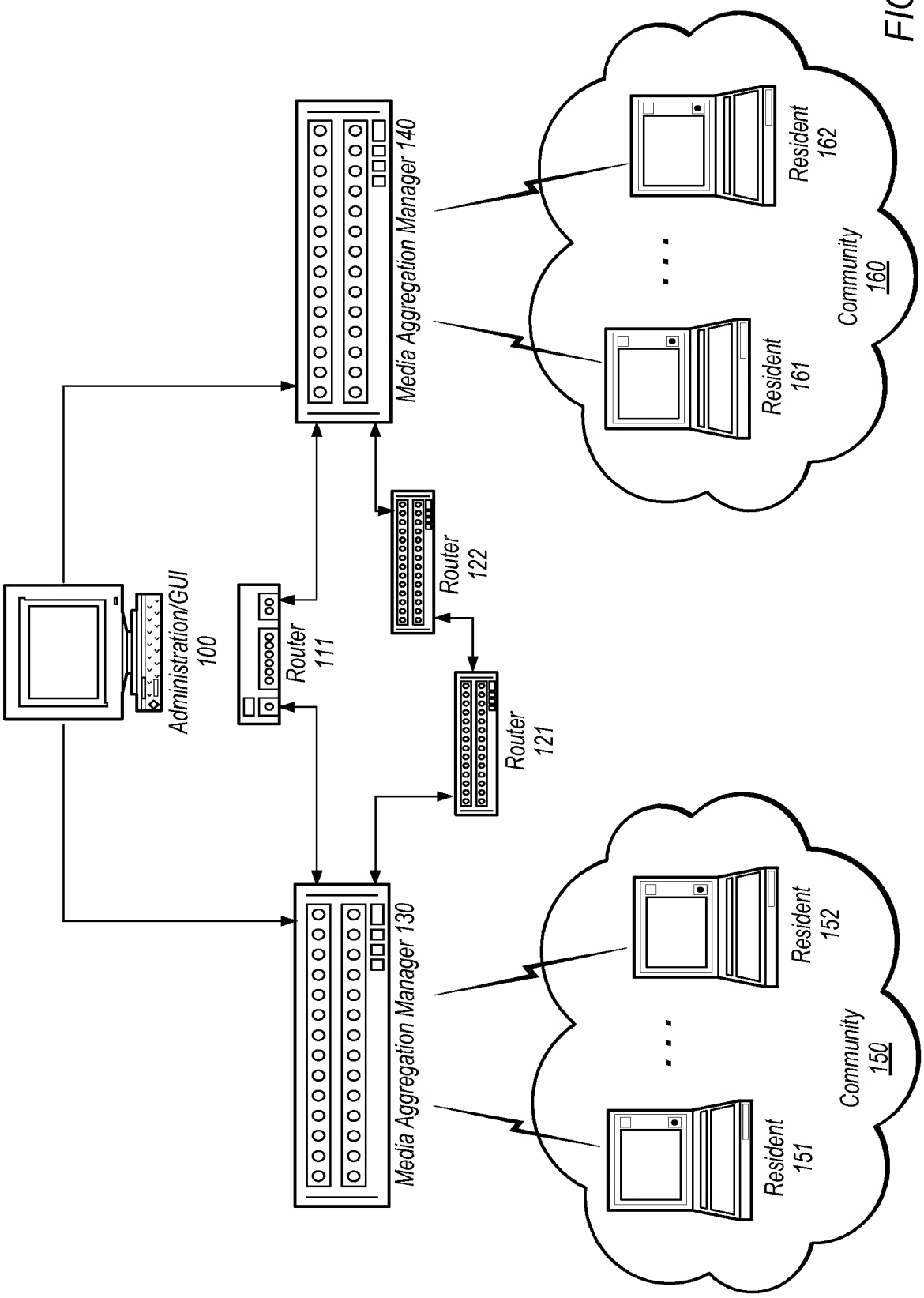
Administration/GUI
100
Router
111
Router
122
Router
121
Media Aggregation Manager 140
Media Aggregation Manager 130
Resident
162
Resident
161
Community
160
Resident
152
Resident
151
Community
150

FIG. 1

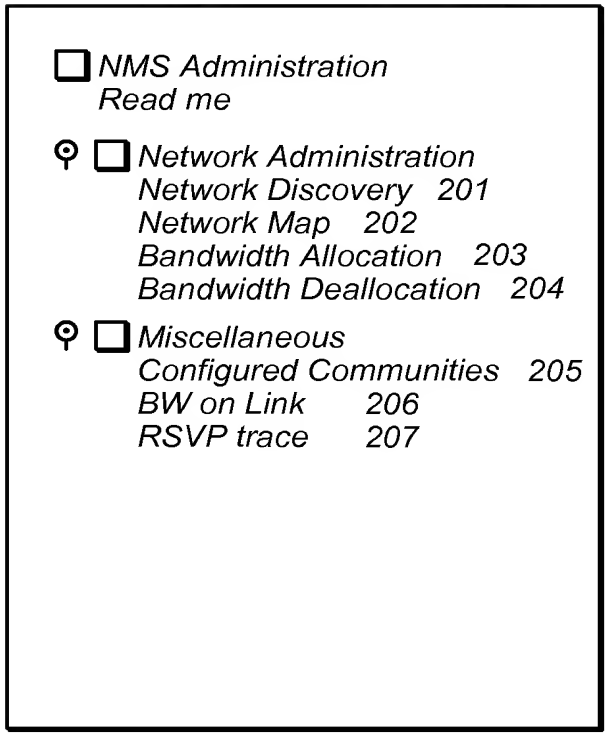
NMS Administration
Read me
Network Administration
Network Discovery 201
Network Map 202
Bandwidth Allocation 203
Bandwidth Deallocation 204
Miscellaneous
Configured Communities 205
BW on Link 206
RSVP trace 207

FIG. 2

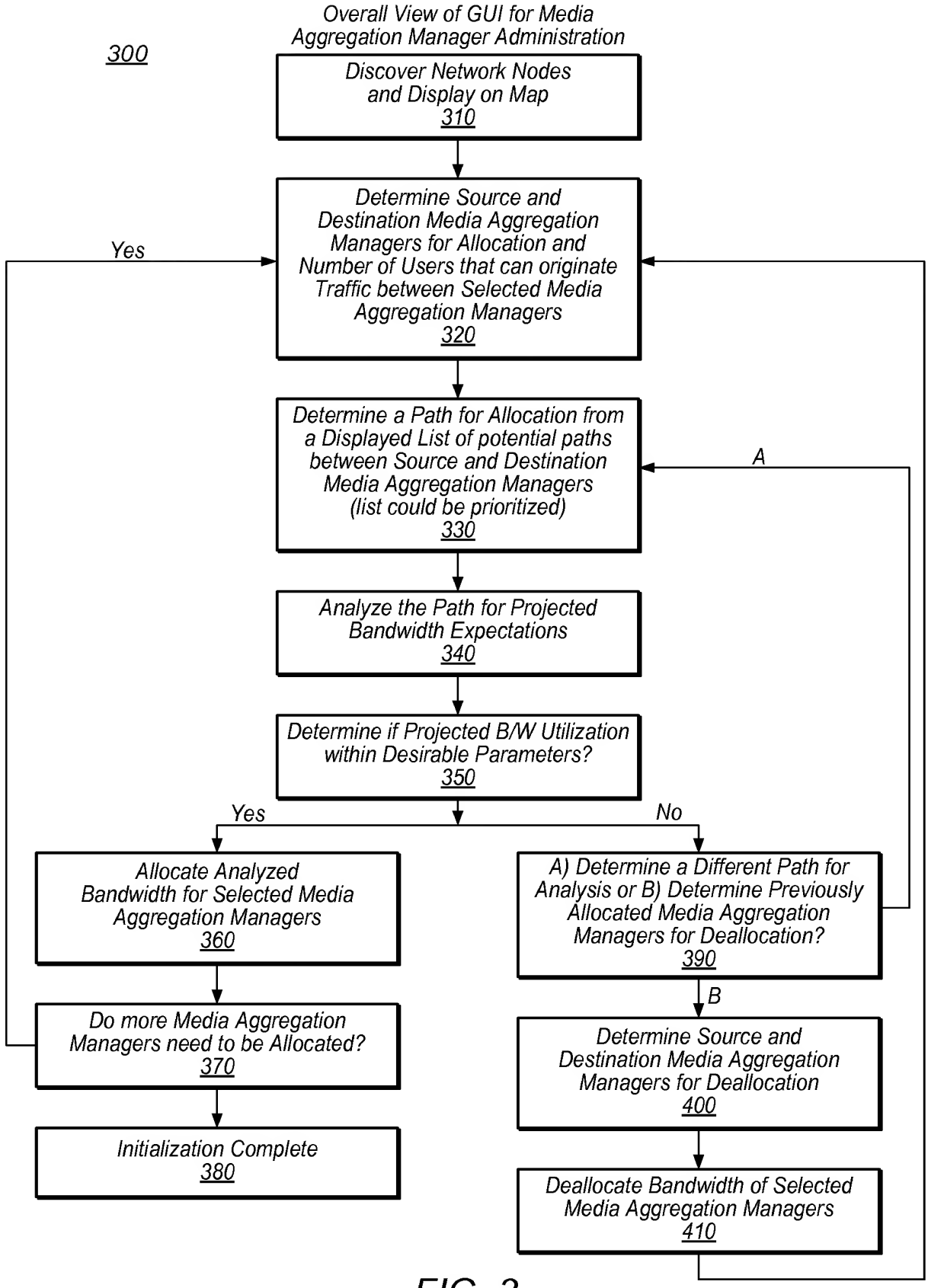
300
Overall View of GUI for Media Aggregation Manager Administration
Discover Network Nodes and Display on Map
310
Determine Source and Destination Media Aggregation Managers for Allocation and Number of Users that can originate Traffic between Selected Media Aggregation Managers
320
Yes
Determine a Path for Allocation from a Displayed List of potential paths between Source and Destination Media Aggregation Managers (list could be prioritized)
330
A
Analyze the Path for Projected Bandwidth Expectations
340
Determine if Projected B/W Utilization within Desirable Parameters?
350
Yes
No
Allocate Analyzed Bandwidth for Selected Media Aggregation Managers
360
Do more Media Aggregation Managers need to be Allocated?
370
Initialization Complete
380
A) Determine a Different Path for Analysis or B) Determine Previously Allocated Media Aggregation Managers for Deallocation?
390
B
Determine Source and Destination Media Aggregation Managers for Deallocation
400
Deallocate Bandwidth of Selected Media Aggregation Managers
410

FIG. 3

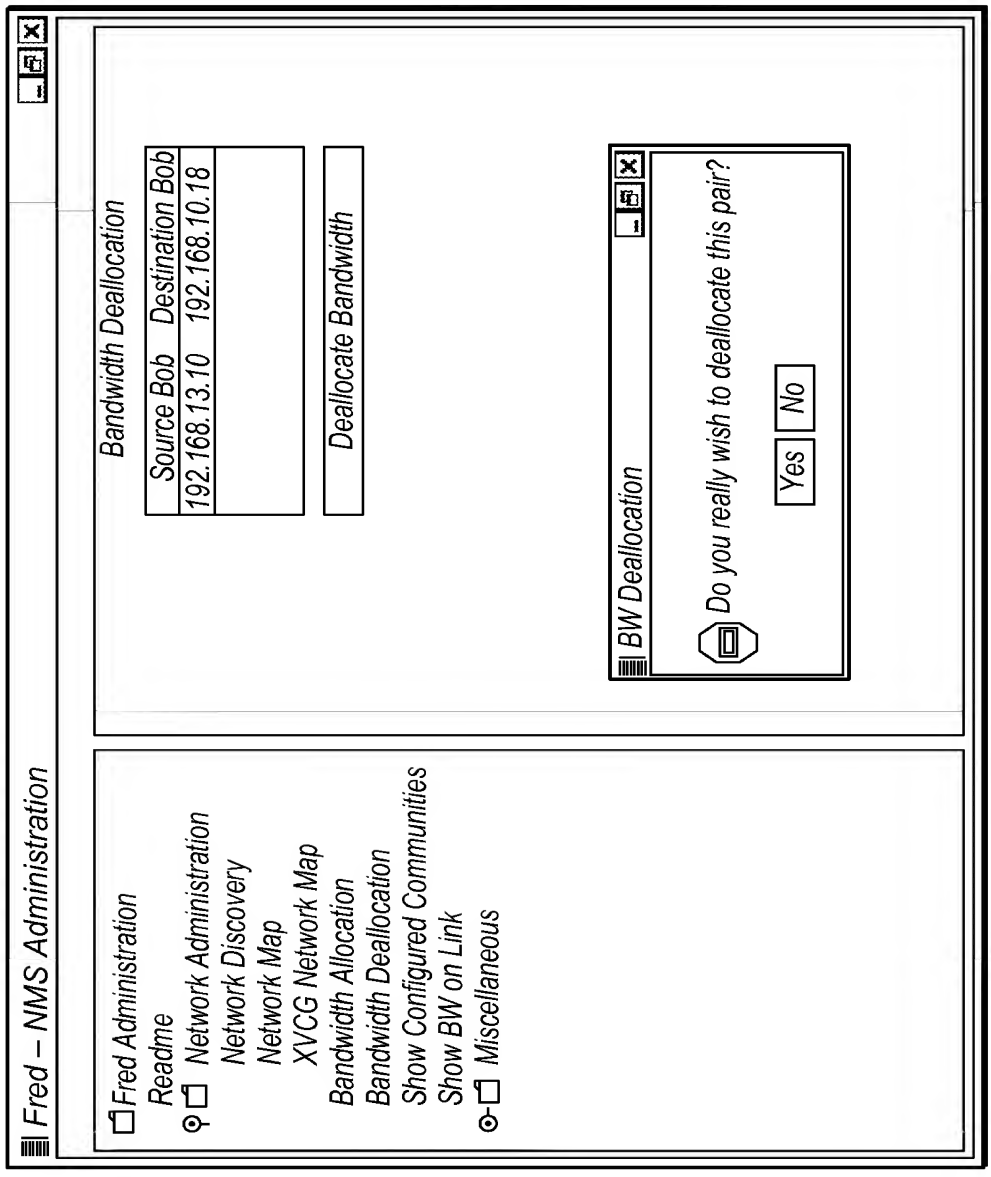
Fred – NMS Administration
Fred Administration
Readme
Network Administration
Network Discovery
Network Map
XVCG Network Map
Bandwidth Allocation
Bandwidth Deallocation
Show Configured Communities
Show BW on Link
Miscellaneous
Bandwidth Deallocation
Source Bob
Destination Bob
192.168.13.10
192.168.10.18
Deallocate Bandwidth
BW Deallocation
Do you really wish to deallocate this pair?
Yes
No

FIG. 4

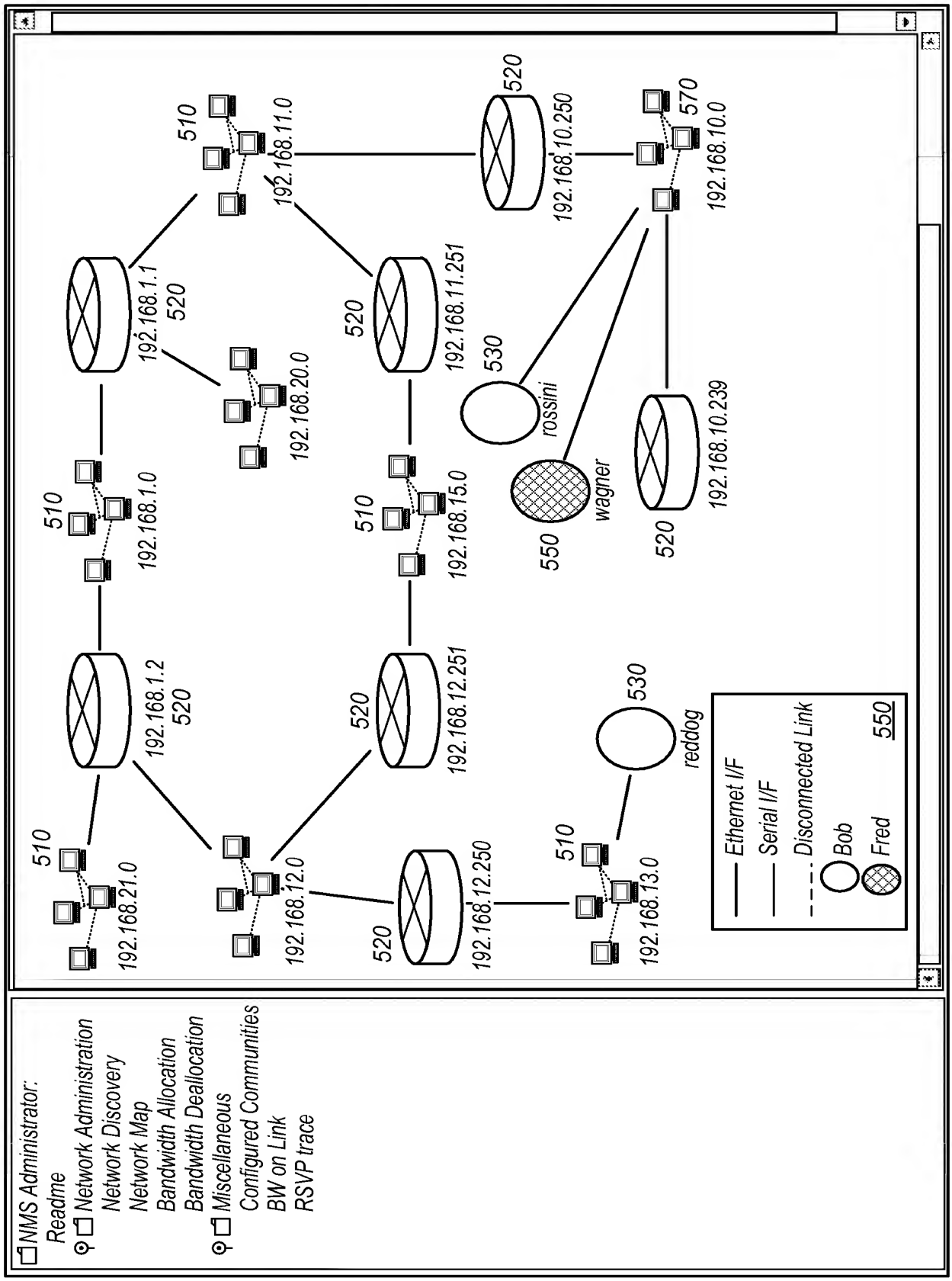
NMS Administrator:
Readme
Network Administration
Network Discovery
Network Map
Bandwidth Allocation
Bandwidth Deallocation
Miscellaneous
Configured Communities
BW on Link
RSVP trace
192.168.21.0
192.168.12.0
192.168.13.0
192.168.1.0
192.168.20.0
192.168.15.0
192.168.1.1
192.168.1.2
192.168.12.250
192.168.12.251
192.168.11.0
192.168.11.251
192.168.10.250
192.168.10.239
192.168.10.0
510
520
530
550
570
reddog
rossini
wagner
Ethernet I/F
Serial I/F
Disconnected Link
Bob
Fred

FIG. 5

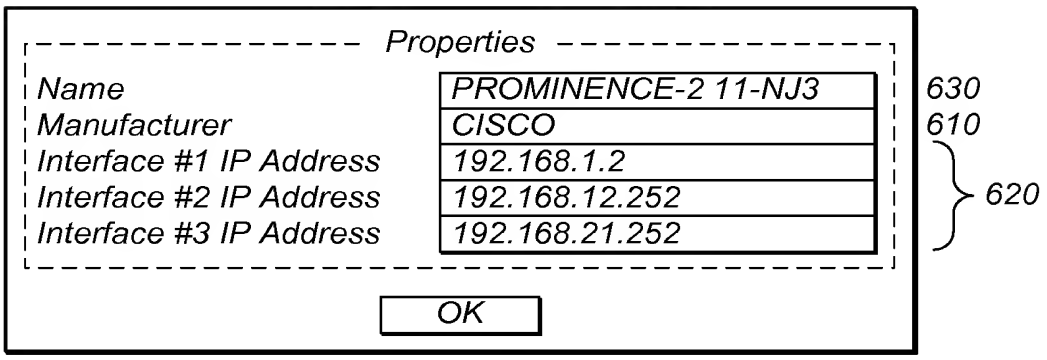
Properties
Name
PROMINENCE-2 11-NJ3
Manufacturer
CISCO
Interface #1 IP Address
192.168.1.2
Interface #2 IP Address
192.168.12.252
Interface #3 IP Address
192.168.21.252
OK
630
610
620

FIG. 6

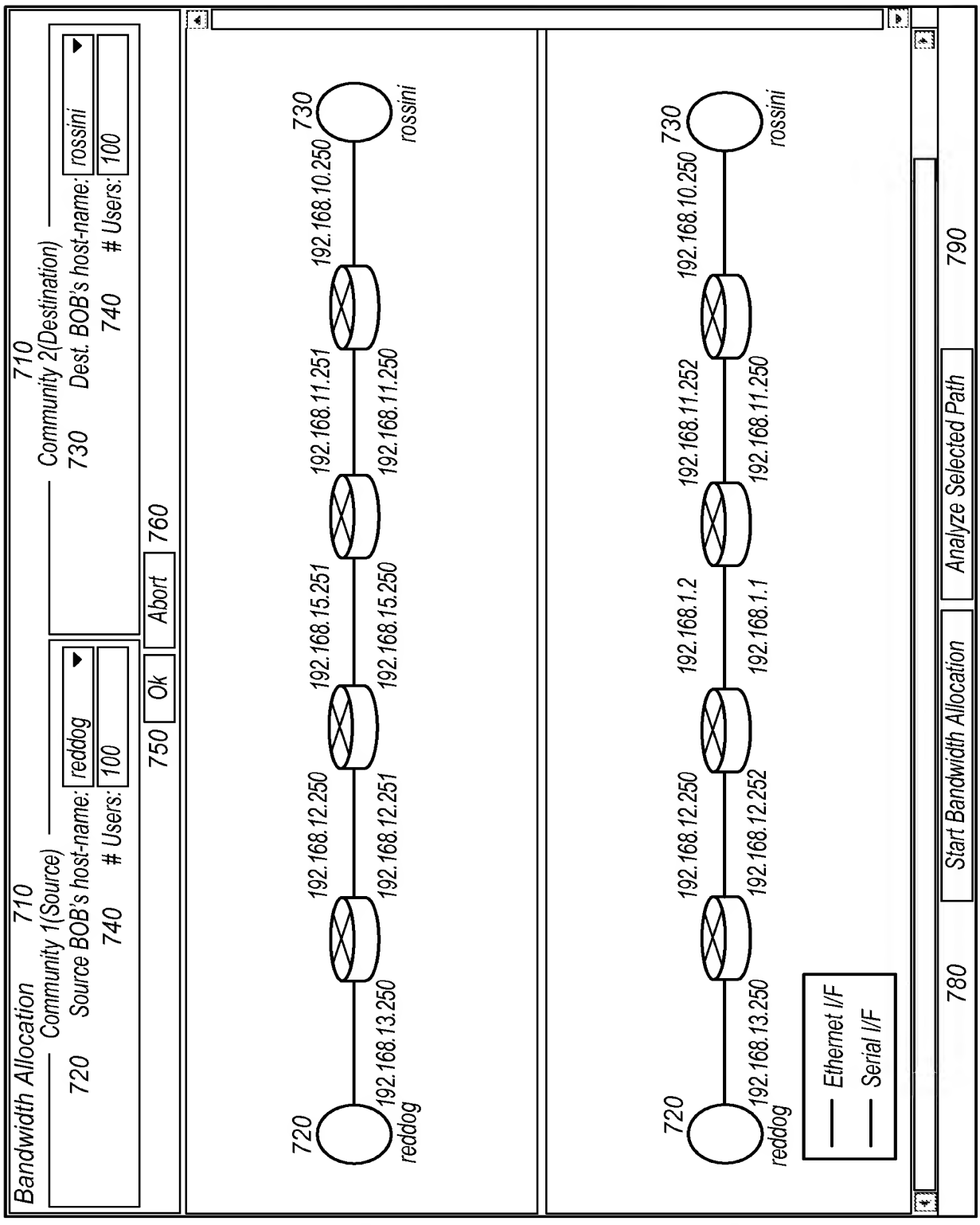
Bandwidth Allocation
710
Community 1(Source)
720 Source BOB's host-name: reddog
740 # Users: 100
Community 2(Destination)
730 Dest. BOB's host-name: rossini
740 # Users: 100
750 Ok
Abort 760
720
192.168.13.250
reddog
192.168.12.250
192.168.12.251
192.168.15.250
192.168.15.251
192.168.11.250
192.168.11.251
192.168.10.250
730
rossini
770
Ethernet I/F
Serial I/F
780
Start Bandwidth Allocation
Analyze Selected Path
790

FIG. 7

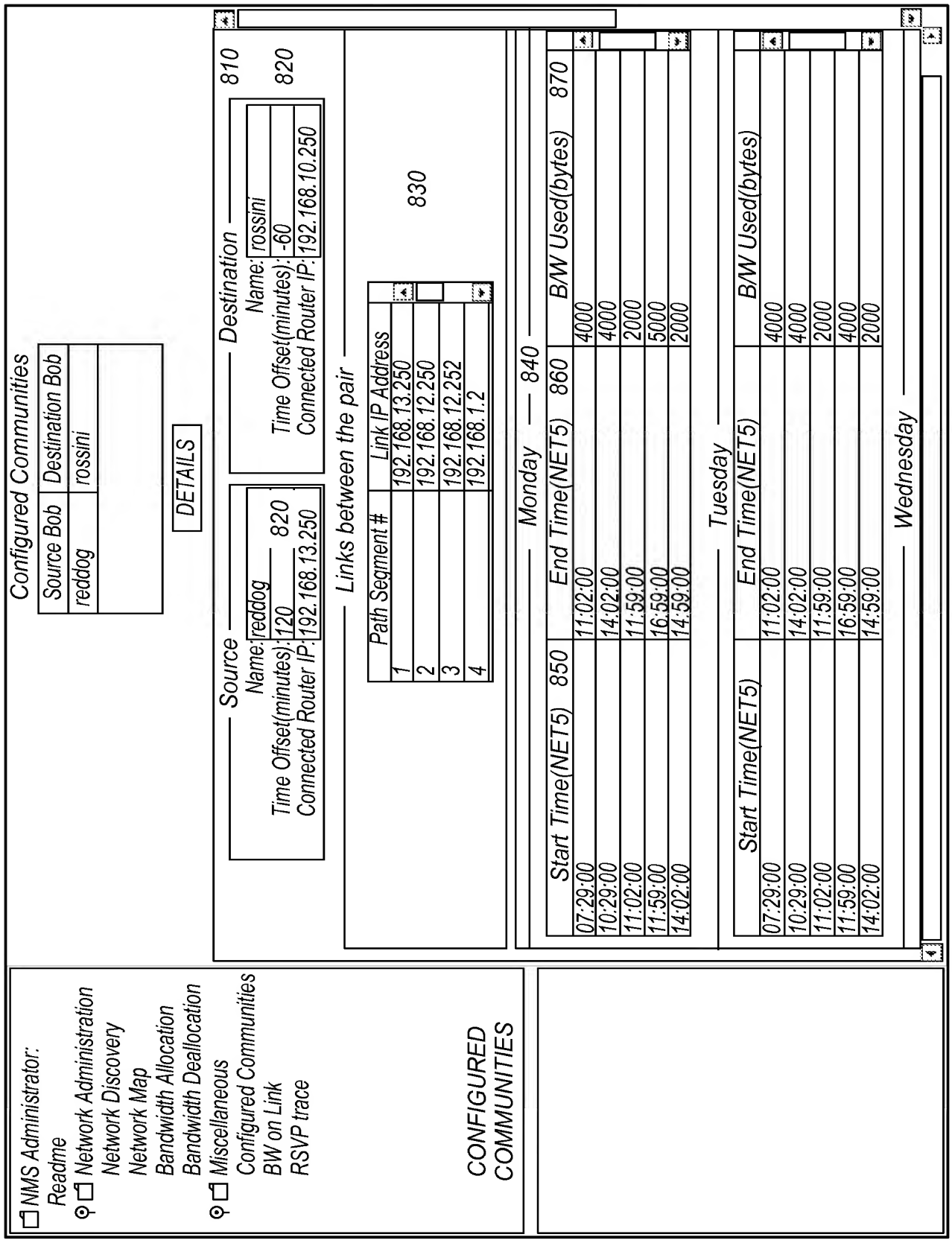
NMS Administrator:
Readme
Network Administration
Network Discovery
Network Map
Bandwidth Allocation
Bandwidth Deallocation
Miscellaneous
Configured Communities
BW on Link
RSVP trace
CONFIGURED COMMUNITIES
Configured Communities
Source Bob
Destination Bob
reddog
rossini
DETAILS
Source
Name: reddog
Time Offset(minutes): 120
Connected Router IP: 192.168.13.250
820
Destination
Name: rossini
Time Offset(minutes): -60
Connected Router IP: 192.168.10.250
820
810
Links between the pair
Path Segment #
Link IP Address
1 192.168.13.250
2 192.168.12.250
3 192.168.12.252
4 192.168.1.2
830
Monday
840
Start Time(NET5) 850
End Time(NET5) 860
B/W Used(bytes) 870
07:29:00 11:02:00 4000
10:29:00 14:02:00 4000
11:02:00 11:59:00 2000
11:59:00 16:59:00 5000
14:02:00 14:59:00 2000
Tuesday
Start Time(NET5)
End Time(NET5)
B/W Used(bytes)
07:29:00 11:02:00 4000
10:29:00 14:02:00 4000
11:02:00 11:59:00 2000
11:59:00 16:59:00 4000
14:02:00 14:59:00 2000
Wednesday

FIG. 8

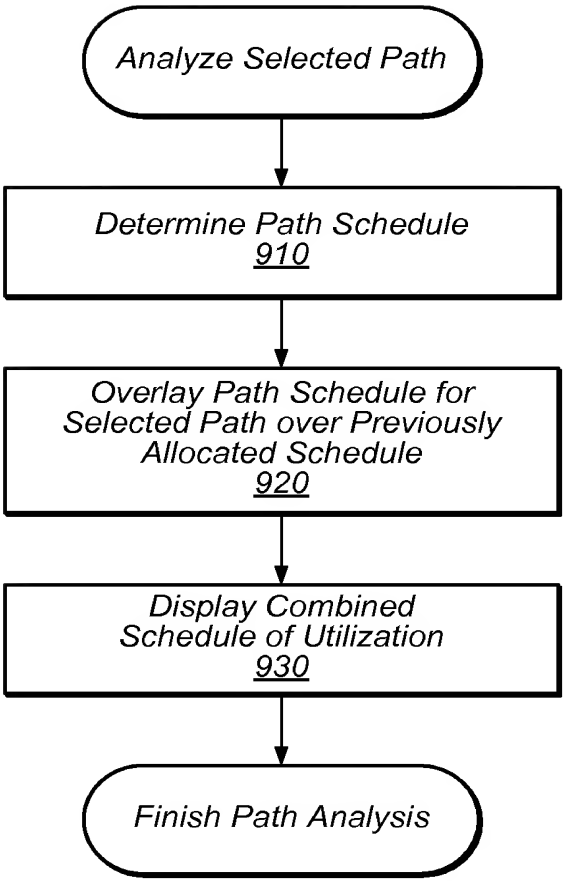
Analyze Selected Path
Determine Path Schedule
910
Overlay Path Schedule for Selected Path over Previously Allocated Schedule
920
Display Combined Schedule of Utilization
930
Finish Path Analysis

FIG. 9

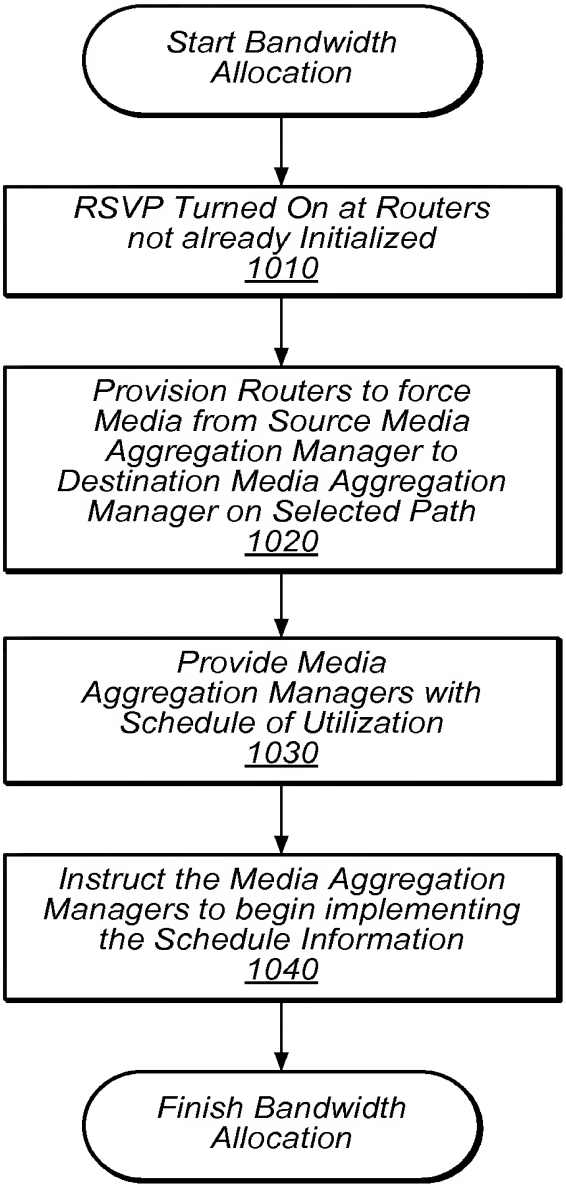
Start Bandwidth Allocation
RSVP Turned On at Routers not already Initialized
1010
Provision Routers to force Media from Source Media Aggregation Manager to Destination Media Aggregation Manager on Selected Path
1020
Provide Media Aggregation Managers with Schedule of Utilization
1030
Instruct the Media Aggregation Managers to begin implementing the Schedule Information
1040
Finish Bandwidth Allocation

FIG. 10